Psychological resources and student burnout among pre-university students

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Abstract

The expectations imposed on students to achieve good academic performance have continually increased. This study's objective was to explore how career adaptability, psychological capital, and mental health indicators predict student burnout. A total of 1,398 students intending to enter higher education in 2020 participated; most were women from the Southeast. The results indicate that perception of control and resilience protects students from exhaustion, while stress and depression favor its emergence. In addition, the concern, anxiety, optimism, and resilience constructs prevent disengagement, while depression facilitates disengagement to be experienced in daily life. These findings reinforce the relationship between personal resources and well-being in the academic environment.

Keywords: Students; Mental health; Occupational stress; Career choice.

Recursos psicológicos e burnout estudantil em pré-vestibulandos

Resumo

A expectativa de bom desempenho acadêmico cresce gradualmente e desenvolver habilidades para lidar com os desafios do período do vestibular se faz cada vez mais importante. O objetivo deste artigo foi explorar como recursos de adaptabilidade de carreira, capital psicológico e indicadores de saúde mental predizem o Burnout de estudantes. Participaram deste estudo 1398 estudantes que visavam ingressar no ensino superior no ano de 2020, sendo maioria mulher e que pertencia à região sudeste. Os resultados indicaram que a percepção de controle e resiliência favorecem ao estudante a não vivenciar a exaustão, bem como o estresse e depressão favorecem o seu surgimento. Construtos de preocupação, ansiedade, otimismo e resiliência evitam o desengajamento e a depressão colabora para que este esteja presente no dia a dia. A partir disso, os achados desta pesquisa enfatizam a relação existente entre recursos pessoais e bem-estar no ambiente dos estudos.

Palavras-chave: Estudantes; Saúde mental; Stress ocupacional; Escolha profissional.

Recursos psicológicos y agotamiento estudiantil en estudiantes preuniversitarios

Resumen

La expectativa de un buen desempeño académico crece gradualmente y el desarrollo de habilidades para enfrentar desafíos del período vestibular es importante. El objetivo del artículo fue explorar cómo recursos de adaptabilidad a la carrera, Capital Psicológico y indicadores de salud mental predicen Burnout de estudiantes. Participaron 1398 estudiantes con objetivo de ingresar a la educación superior en 2020, la mayoría eran mujeres y pertenecían a región sureste. Resultados indicaron que percepción de control y resiliencia favorecen que el alumno no experimente agotamiento, así como el estrés y la depresión favorecen su aparición. Las construcciones de preocupación, ansiedad, optimismo y resiliencia previenen la desconexión y la depresión ayuda a asegurar que esté presente en la vida cotidiana. A partir de esto, los hallazgos de esta investigación enfatizan la relación entre los recursos personales y el bienestar en el ambiente de estudio.

Palabras clave: Estudiantes; Salud mental; Estrés ocupacional; Escogimiento profesional.

An individual's trajectory built throughout life is more than the mere sum of choices and occupational roles. This trajectory is called a career (Angelin et al., 2017; Super et al., 1996). It concerns the way individuals organize experiences to produce a meaningful story (Rizzatti et al., 2018; Savickas, 2013). A change in an individual's career environment is a transition that can assume different social, cultural, professional, and relational characteristics or integrate all these elements (Balleux & Perez-Roux, 2011; Hennequin et al., 2017).

Every career transition involves changes in one's personal and professional life; habits and roles may demand adaptation, and there might be repercussions depending on the voluntary, mandatory, or unpredictable nature of changes (Hennequin et al., 2017). In addition, destabilizing effects may be experienced when there is a perception of failure, guilt, anger, or insecurity (Hennequin et al., 2017; Van der Horst et al., 2017).

Career adaptability becomes relevant in this context. It originated in the concept of vocational maturity (Cattani et al., 2016; Super et al., 1996) and is characterized as an individual's ability to deal with vocational development tasks and occupational transitions to solve complex problems throughout life (Cericatto et



al., 2017; Savickas et al., 2009). Hence, career adaptability is defined as a psychosocial construct that refers to an individual's ability to deal with current and imminent career development tasks, occupational transitions, and personal trauma (Ambiel, 2014; Savickas, 2013).

The ability to adapt has a functional aspect of coping with unforeseen, ill-defined, and complex problems (Audibert & Teixeira, 2015; Savickas, 2013). Furthermore, it is a multidimensional construct composed of four domains or main dimensions: 1) concern with one's professional prospects; 2) control, i.e., feeling responsible for building one's own career; 3) curiosity, having the initiative to learn and seek knowledge in the occupational field one desires to engage; and 4) confidence, i.e., being confident to endeavor and make the necessary efforts to achieve one's goals (Audibert & Teixeira, 2015).

Psychological capital is another relevant construct that concerns the psychological resources needed for personal development that facilitates career transitions. It is defined as an individual's strength and positive attitude, positive psychological development that improves one's chance of success because it involves perseverance and effort (Calvo & Garcia, 2020; Luthans et al., 2015). Even though this construct emerged in the organizational environment, students can benefit from these resources (Sweet & Swayze, 2020).

Luthans and collaborators (Luthans, 2002; Luthans et al., 2007) developed the concept of psychological capital with four dimensions (i.e., optimism, self-efficacy, hope, and resilience). These psychological abilities manifest in the academic environment when students assess their current situation and the likelihood of success, keeping a positive perspective (optimism), being more likely to implement the effort necessary, persevering to obtain success, and believing in oneself (self-efficacy), being determined to be successful (hope), and growing and learning with challenges (resilience) (Martínez et al., 2019). Hence, psychological skills are essential for individuals to develop the positive behaviors that enable them to achieve their goals, representing an individual's level of commitment toward his/her goals (Venkatesh & Blaskovich, 2012; Pletsch & Zonatto, 2018; Zonatto et al., 2020).

The challenges of pre-university education and study hypotheses

Academic stress is a growing global problem (Sangma et al., 2018). There are increasing expectations for students to achieve academic performance, success, and excellence (Poots & Cassidy, 2020). In Brazil, the selective process students undergo to be admitted into higher education (e.g., Enem and others) demand students to attend preparatory programs and classes daily. These programs are often highly demanding, and the process is surrounded by competition and much uncertainty (Schönhofen et al., 2020).

The preparatory process and the means to enter a university may lead to behavioral instability and psychopathologies like anxiety, depression, and stress, affecting the students' quality of life (Daolio & Neufeld, 2017). Furthermore, constantly working to adapt to this environment and meet demands and expectations toward one's future professional life are important stressors that may lead to burnout if persisting over time (Uribe & Illesca, 2017).

Student burnout is a response to chronic stress when students realize discrepancies between their resources and success expectations (Farina et al., 2020). Evidence shows that students are increasingly experiencing burnout symptoms (Güler, 2020; Heinen et al., 2017), which are harmful and favor a lack of interest in academic activities (Güler, 2020; Lin & Huang, 2014).

Knowledge regarding a given population's emotional state and behavior supports health promotion and the prevention of diseases. Hence, investigating the factors associated with mental health problems is relevant for devising interventions (Chagas et al., 2016). Considering this context, this study is intended to explore how career adaptability, psychological capital, and mental health indicators predict student burnout. Thus, this study was guided by hypotheses based on the theoretical framework provided by the literature in the field.

Studies show a high incidence of stress and anxiety among students intending to enter university (Andrade et al., 2016); however, as noted by Daolio and Neufeld (2017), there are no Brazilian studies specifically addressing the association between depression and the selective process for higher education in depth. Additionally, burnout may result in stress, anxiety, and depression (Von Harscher et al., 2018). Seeking to contribute to studies addressing depression among students preparing for high education selective processes, we hypothesize that stress, anxiety, and depression are positively and significantly related to student burnout (H1). Considering that two dimensions compose burnout: exhaustion and disengagement (Reis et al., 2015; Matos, 2020), the second hypothesis is that students' depression is positively associated with exhaustion (H2a) and disengagement (H2b).

While career adaptability is defined as an individual's resources to deal with career tasks and transitions, student burnout concerns exhaustion caused by academic activities, involving a detached and negative attitude toward studies and a sense of incompetence (Palos et al., 2019). These constructs are relevant in the academic context and support understanding the students' context and environmental changes that might benefit students; these constructs have been negatively associated among Spanish students (Merino-Tejedor et al., 2016). Therefore, student burnout is expected to negatively correlate with career adaptability among Brazilian students (H3). To explore the relationship and opposite nature of these constructs even further, we hypothesize that career adaptability is a variable that predicts exhaustion (H4a) and disengagement (H4b).

Finally, psychological capital is a resource that facilitates the processes promoting attention, interpretation, and retention of positive and constructive memories that guide well being and good performance (Carmona-Halty et al., 2019); hence, it is positively related to being engaged with learning (Datu et al., 2016). Considering the need for empirical studies addressing psychological capital in the academic context (You, 2016) and its relevance for positively influencing learning and academic success (Datu et al., 2016), we hypothesize that the psychological capital dimensions are negatively correlated with student burnout (H5).

Considering the aspects encompassing the lives of students attempting to enter higher education, this study's primary objective is to investigate student burnout and psychological capital, constructs seldom investigated in this population. Additionally, we expect to advance on knowledge concerning career transition and career adaptability among students.

Method

Participants

The sample was composed of 1,398 students preparing to enter higher education in 2020. Most were women (81.7%; n = 1,142), aged 19.06 (SD=3.24) years old on average. The students were from 25 Brazilian states and the Federal District; Roraima is the only state with no representatives. Most of the participants were from São Paulo (n=218; 15.6%), Minas Gerais (n=195; 13.9%), and Espírito Santo (n=143; 10.2%). Additionally, most participants were single (n=1,349; 96.5%); 87.4% did not have a paid job; 98.7% had no children; while 37.2% received from one to three times the minimum wage.

Regarding the characteristics concerning the academic environment, most participants intended to attend one undergraduate program (95.2%; n=1,331), had already chosen the program (83.3%; n=1,165); and (64,2%; n=898) intended to enter a public university. Finally, they had been preparing for the selective process from six months to one year (31.7%; N=443), and most were attending a public high school at the time of data collection (N=710; 50.8%).

Instruments

- a) Oldenburg Burnout Inventory Student Version (Matos, 2020) is intended to assess student burnout through 15 items rated on a Likert scale (1= Totally disagree to 4= Totally agree). It has two dimensions: exhaustion (e.g., There are days when I feel tired before I start studying"; $\omega = 0.81$), and disengagement (e.g., "Lately, I tend to think less about my academic tasks and work on them almost mechanically"; $\omega = 0.83$).
- b) Career Adapt-abilities Scale (Audibert & Teixeira, 2015) is intended to assess the ability of people to adapt and manage critical tasks during career transitions. This scale is composed of 24 items (e.g., "Thinking about what my future will be like") rated on a five-point Likert scale, i.e., individuals are asked to rate how strongly they have developed abilities (1=Not strong 5=Strongest). The items are distributed into four dimensions: concern (α =0.88), control (α =0.83), curiosity $(\alpha=0.88)$, and confidence $(\alpha=0.89)$.
- c) Depression, Anxiety, and Stress Scale (DASS-21)-(Patias et al., 2016) is composed of three subscales addressing depression, anxiety, and stress symptoms. Each subscale contains seven items rated on a four-point Likert scale (0= Did not apply to me at all over the past week 3= Applied to me very much or most of the time over the past week), presenting good internal consistency (α = 0.86 for the stress subscale, α =0.83 for the anxiety subscale, and α = 0.90 for the depression subscale).
- d) Psychological Capital Scale in the Student Context (PsyCap-S) (Matos, 2020) measures psychological capital in the academic environment. It

is composed of four dimensions that presented good internal consistency: self-efficacy (ω =0.70), optimism (ω =0.85), hope (ω =0.62), and resilience $(\omega=0.73)$. The scale comprises 12 items (three for each dimension) rated on a five-point Likert scale (1= completely disagree to 5= completely agree).

e) Sociodemographic questionnaire to characterize the sample, addressing age, sex, marital status, income, state of residence, and routine of studies, among others.

Data collection procedures

This study was submitted to and approved by the Institutional Review Board at the Federal University of Espírito Santo (CAAE: 12681519.8.0000.5542). High schools and preparatory courses were contacted to invite participants. Social media (Facebook, Whatsapp, Twitter, and Instagram) was also used to recruit a more comprehensible sample. The instruments were answered through an online form (Google Forms).

The participants confirmed their consent by signing free and informed consent forms. Access to the form was allowed to those who provided voluntary consent. Data were collected from August/2019 to January/2020.

Data analysis procedures

Descriptive statistics were performed to characterize the sample and analyze data distribution based on frequency, mean, and standard deviation. Next, correlation and hierarchical regression analyses were performed (Hair et al., 2010). Three regression models were specified, considering exhaustion and disengagement as dependent variables (student burnout dimensions). The first model's independent variables were career adaptability dimensions (i.e., concern, control, curiosity, and confidence). The second model included the career adaptability dimensions and stress, anxiety, and depression, while the third model added the psychological capital dimensions to the previous model (self-efficacy, optimism, hope, and resilience). Data were analyzed using the R Stats package (R Core Team, 2017).

Results

Table 1 presents the descriptive data (mean and standard deviation) of the variables investigated, including Pearson's r correlation. The factor analysis of the psychometric scales indicates that the levels of the career adaptability dimensions were above the mean; the concern dimension stood out (M=3.74). Anxiety, depression, and stress levels were also above the mean; stress levels were the most characteristic of the three (M=1.74). Regarding the psychological capital dimensions, the sample presented more accentuated characteristics of hope (M=4.61), followed by optimism (M=4.34). Finally, student burnout scores were above the mean: the mean obtained for exhaustion was 3.19, and for disengagement, it was 2.36.

The correlations analysis shows that disengagement presented a moderate, negative significant association with concern (r = -0.37), control (r = -0.39), curiosity (r = -0.34), and confidence (r = -0.38), while exhaustion presented a negative, though weak significant association with all career adaptability dimensions: concern (r = -0.15), control (r = -0.28), curiosity (r =-0.17), and confidence (r = -0.18). The psychological capital dimensions were also moderately and negatively associated with disengagement; resilience (r= -0.44) and optimism (r= -0.38) stood out. A similar result was found in the association between exhaustion and the psychological capital dimensions; resilience presented the highest association (r = -0.40). Finally, positive moderately significant associations were found between disengagement and depression (r=0.44), exhaustion and stress (r=0.52), depression (r=0.49), and anxiety (r=0.44).

Student Burnout Predictors

Two hierarchical linear regression analyses were performed using the R Stats Package to investigate the predictive aspects of burnout. Disengagement and exhaustion were used as the dependent variables. The model was configured in the first block with the career adaptability dimensions. The second block included mental health aspects, and the third block included the psychological capital dimensions. Table 2 presents the percentage of explained variance, the coefficient of regression, and the statistical significance of the models' predicting variables.

Analysis of the exhaustion predictors in the first model showed that the control dimension negatively and significantly predicted burnout. When stress, anxiety, and depression were added to the second model, control (negative), stress, and depression predicted exhaustion. Including the psychological capital dimensions in model 3 and greater theoretical complexity revealed that control (negative), stress, depression, and resilience (negative) predicted exhaustion.

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Description

	Mean SD 1	SD		2	3	4	5	9	_	∞	6	10	11	12	13
1. Concern	3.74	0.88	1												
2. Control	3.60	0.87	0.62**	1											
3. Curiosity	3.52	0.84	0.61**		_										
4. Confdence	3.66	0.83	**09.0	0.64**	0.65**										
5. Stress	1.74	0.85	-0.02	-0.17**	-0.02	-0.08**	_								
6. Depression	1.58	0.90	-0.18**	-0.29**	-0.16**	-0.21**	0.70**								
7. Anxiety	1.27	0.86	-0.04	-0.16**	-0.00	-0.05*	**92.0	0.62**							
8. Hope	4.61	0.55		0.28**	0.27**	0.29**	-0.01	-0.12**	-0.03	1					
9. Auto-efficacy	3.58		0.35**	0.35**	0.37**		-0.17**	-0.24**	-0.15**	0.32**	_				
10. Optimism	4.34	0.86	0.37**	0.34**	0.27**	0.32**		-0.27**	-0.14**	**09.0	0.37**	1			
11. Resilience	2.62	1.12	0.30**	0.39**	0.36**	0.37**		-0.33**	-0.20**	0.26**		0.39**	_		
12. Exhaustion	3.19	0.62	-0.15**	-0.28**	-0.17**	-0.18**	0.52**	0.49**	0.44**	-0.11**	-0.29**	-0.19**	-0.40**	1	
	2.36	0.53	-0.37**	-0.39**	-0.34**	-0.38**	0.28**	0.44**		-0.28**		-0.38**	-0.44**	0.47**	1

Legend:1. Concern; 2. Control; 3. Curiosity; 4. Confidence; 5. Stress; 6. Depression; 7. Anxiety; 8. Hope; 9. Self-efficacy; 10. Optmism; 11. Resilience; 12. Exhaustion; 13. Disengagement. **Level significance at ρ <0.01; * Level of significance at ρ <0.05

On the other hand, analysis concerning the predictors of disengagement in the first model revealed a negative and significant association with concern, confidence, and control. The dimensions concern (-), confidence (-), anxiety (-), and depression (+) appeared as significant predictors of disengagement in model 2. In the last model, concern, anxiety, optimism, and resilience negatively predicted disengagement, while depression positively predicted it. Finally, Model 3 explains the highest percentage of the variance of the two dimensions analyzed.

Discussion

This study intended to investigate how resources concerning career adaptability, psychological capital, and mental health indicators predict burnout among students. The descriptive analysis showed that this study's sample presented levels above the mean in all the constructs analyzed. The level of concern is highlighted as it indicates that the students tended to perceive the impact of their present actions on their future careers and have a clear understanding of what they seek in their future careers. This result is similar to that found among students addressed in Trinidad and Tobago (Wilkins-Yel et al., 2018), who also presented high levels of concern. Additionally, the sample presented hope and optimism above the mean, similar to the result found among Israeli students (Hazan Liran & Miller, 2017), corroborating an understanding that these psychological capital dimensions contribute to coping with challenges (Lima & Nassif, 2017), and are correlated with adaptation in the academic environment (Hazan Liran & Miller, 2017).

On the other hand, anxiety, depression, stress, and student burnout were also above the mean; stress and exhaustion levels stood out. The sample's descriptive data are similar to those reported by a study addressing Korean students (Lee et al., 2020) and by the literature in the field concerning stress and exhaustion (Shadid et al., 2020). This study shows that even though the students had resources to plan their careers, they were possibly experiencing an excess of academic demands.

The correlation analyses corroborate H1, as positive and significant relationships were found between burnout and depression, stress, and anxiety. The highest level of correlation found among the burnout dimensions was between exhaustion and stress (r=0.52). This relationship has been reported since the

Table 2. Exhaustion and Disengagement Predictors

	Exhaustion			Disengagement		
Model 1	\mathbb{R}^2	Beta	Sig.	R ²	Beta	Sig.
Concern		0.04	0.20		-0.15	0.00
Control	0.4007	-0.31	0.00	10.000/	-0.17	0.00
Curiosity	8.40% R ²	0.02	0.52	19.90%	-0.02	0.52
Confidence		-0.03	0.40		-0.17	0.00
Model 2		Beta	Sig.	\mathbb{R}^2	Beta	Sig.
Concern		0.00	0.41		-0.15	0.00
Control	33.40%	-0.14	0.00		-0.07	0.03
Curiosity		-0.04	0.04		-0.04	0.15
Confidence		0.00	0.62	32.00%	-0.14	0.00
Stress		0.32	0.00		0.09	0.02
Depression		0.18	0.00		0.36	0.00
Anxiety		0.05	0.10		-0.12	0.00
Model 3	\mathbb{R}^2	Beta	Sig.	\mathbb{R}^2	Beta	Sig.
Concern		0.01	0.55		-0.10	0.00
Control		-0.11	0.00		-0.03	0.30
Curiosity		-0.00	0.98		-0.01	0.62
Confidence		0.04	0.18		-0.09	0.01
Stress	37.90%	0.30	0.00		0.08	0.02
Depression		0.14	0.00	37.70%	0.30	0.01
Anxiety		0.05	0.10		-0.12	0.00
Норе		-0.01	0.62		-0.05	0.06
Self-efficacy		-0.08	0.00		-0.05	0.05
Optimism		0.03	0.29		-0.10	0.00
Resilience		-0.20	0.00		-0.17	0.00

Note. Model 1 was developed with the career adaptability dimensions; Model 2 added mental health aspects, and Model 3 added the psychological capital dimensions.

first studies implemented in the occupational context. In the academic environment, a constant need to adapt to the environment (Salami et al., 2017) and excessive demands to achieve academic performance (Aypay, 2017) are stressors that may trigger burnout.

In this study, student burnout was also negatively correlated with the career adaptability dimensions, as previously hypothesized (H3). Even though the relationships were significant, exhaustion presented weak associations, while disengagement was moderately associated with the career adaptability dimensions. Considering that disengagement is defined by one's detachment and negative attitudes toward academic

content, the high negative correlation of this dimension with adaptability is explained by individuals being less willing to work on academic tasks and are less focused on their careers. The findings also corroborate studies that report a negative relationship between career adaptability and student burnout (Merino-Tejedor et al., 2016) and a positive relationship between career adaptability and career engagement (Nilforooshan & Salimi, 2016). Students with high levels of career adaptability tend to feel less exhausted and less frequently experience disengagement in the academic context; thus, take proactive decisions toward their careers, make more conscious choices, and are competent in managing

demands, having greater control over their studies, thus, avoiding physical and mental illnesses.

Significant negative associations were also found regarding the relationship between the psychological capital dimensions and student burnout, confirming hypothesis 5. The highest indexes concerned the moderately significant negative relationships between resilience and exhaustion and resilience with disengagement (r = -0.40 and -0.44). This finding shows that students experiencing burnout may also experience a deficit of personal resources like resilience and face difficulties to overcome the challenges and demands imposed by the preparatory process. The study by García-Izquierdo et al. (2017) is in line with other studies, reporting that resilience was negatively related to exhaustion among Spanish university students; higher levels of resilience were found among Chinese students without burnout symptoms (Ching et al., 2020).

The predictive analysis using hierarchical linear regression revealed that perception of control and resilience protects students from exhaustion, while stress and depression favor its emergence. Likewise, concern, anxiety, optimism, and resilience prevent disengagement in an academic environment, while depression favors it. These results indicate that students who feel responsible for developing their careers (control) and are concerned with the impact of their decisions (concern) are better equipped to organize their routine and make choices, which results in engaged students who feel comfortable in the academic environment. Additionally, students able to deal with difficulties and overcome obstacles (such as failing a test or getting low grades) are less likely to experience exhaustion and disengagement. At the same time, those who are confident that they will succeed in the present and future (optimism) are less likely to experience disengagement.

These results corroborate H2a, H2b, and partially confirm H4a and H4b because only resilience appeared as a predictor of exhaustion and disengagement. Note that the findings concerning the constructs' predictive aspects are in line with the literature reporting that psychological capital had a significant negative relationship with burnout among Iranian students (Soltani et al., 2016), a positive relationship with academic engagement and psychological capital among Chilean students (Carmona-Halty et al., 2019), and a negative relationship between student burnout and career adaptability among Spanish students (Merino-Tejedor et al., 2016).

Regarding the mental health variables, these variables presented a positive predictive power concerning exhaustion, stress, and depression in this study's sample. In addition, anxiety (negative) and depression (positive) predicted disengagement (positive). This result suggests that students experiencing stress or depression tend to experience exhaustion, while those with depression symptoms or mild anxiety symptoms tend to experience disengagement.

In line with the previous results, studies report the frequency of stressors that trigger burnout (Vizoso et al., 2019). Fiorilli et al. (2017) indicate an association between depression and burnout among high school students. Anxiety was a negative predictive variable that appeared in this study but behaved differently from other studies, considering the positive relationship between burnout and anxiety reported in the literature, such as Romano et al. (2020). Low or moderate anxiety levels may favor students to mobilize and pursue academic success and may also encourage students to make efforts to learn content (Ramirez-Arellano, 2019). The opposite nature of the constructs explains one's energy or mobilization to accomplish a goal (anxiety), contrary to disengaging from studies.

This study's findings emphasize the relationship between personal resources and wellbeing in the academic environment. In this sense, aspects such as the support provided by the family and school positively influence the development of career adaptability and psychological capital, favoring a healthy pursuit of goals. However, students may have negative experiences if teaching institutions, professors, or families impose too much pressure and demand students to be highly productive, which favors the development of student burnout and may compromise mental health indicators.

This study has important contributions to studies exploring the experiences of students preparing to enter university. It also presents important constructs in this context, addressing both the resources necessary in an academic environment and the potential impacts on the mental health of these individuals. Additionally, it minimizes the scarcity of Brazilian studies addressing the relationship between depression and the selective process to enter higher education (Daolio & Neufeld, 2017) and meets the need for empirical studies addressing psychological capital in the academic context (You, 2016). Nonetheless, this study presents some limitations related to the fact that most of the participants resided in states located in the Southeast with little representativeness of other Brazilian regions. Additionally, this study was conducted before the Covid-19 pandemic, a novel factor impacting the relationship

between students and admission in higher education. Hence, the results may not represent students' mental health during or after the pandemic.

Despite these limitations, this study collaborates with investigations seeking to explore the students' personal resources and mental health and assess the impact of these constructs. Personal resources are relevant in this context because they support the students' planning and mental health during their paths toward approval in the selective process. However, environmental circumstances and pressure for students to present a high performance often threaten or lead to the exhaustion of the students' resources, and stress is one of the consequences.

Further research is needed to emphasize intervention programs in the academic context, seeking to promote career adaptability and psychological capital, considering that the students can have a healthier experience of the demands imposed in this preparatory period and such experience can be reinforced in the future so that they can enjoy greater wellbeing and mental health. Longitudinal studies are also suggested to assess the implementation of interventions designed to promote career adaptability and psychological capital in the academic context, intending to more deeply assess the relationship between the promotion of these resources and the experience of challenges faced during the preparatory process to enter higher education.

References

- Ambiel, R. A. M. (2014). Adaptabilidade de carreira: uma abordagem histórica de conceitos, modelos e teorias. Revista Brasileira de Orientação Profissional, 15(1), 15-24. http://pepsic.bvsalud. org/scielo.php?script=sci_arttext&pid =S1679-33902014000100004
- Andrade, T. M., Souza, V. N., & Castro, N. R. (2016). Nível de ansiedade e estresse em adolescentes concluintes do ensino médio. Revista Científica Univiçosa, 8(1), 595-600. Recuperado de: https:// academico.univicosa.com.br/revista/index.php/ RevistaSimpac/article/view/706
- Angelin, A. P., Zoltowski, A. P.C., & Teixeira, M. A. P. (2017). A construção do projeto de vida e carreira em estudantes indígenas: um estudo exploratório. Psicologia & Sociedade, 29, e161330. https://doi. org/10.1590/1807-0310/2017v29161330

- Audibert, A., & Teixeira, M. A. P. (2015). Escala de adaptabilidade de carreira: evidências de validade em universitários brasileiros. Revista Brasileira de Orientação Profissional, 16(1), 83-93. http://pepsic. bvsalud.org/scielo.php?script=sci arttext&pid =S1679-33902015000100009
- Aypay, A. (2017). A positive model for reducing and preventing school burnout in high school students. Educational Sciences: Theory & Practice, 17, 1345–1359. http://dx.doi.org/10.12738/estp.2017.4.0173
- Balleux, A., & Perez-Roux, T. (2011). Transitions professionnelles et recompositions identitaires dans les métiers de l'enseignement et de l'éducation. Recherches en éducation, 11, 5-14. https://hal.archivesouvertes.fr/hal-01715836/document
- Carmona-Halty, M., Schaufeli, W. B., & Salanova, M. (2019). Good Relationships, Good Performance: The Mediating Role of Psychological Capital -A Three-Wave Study Among Students. Frontiers in psychology, 10, 306. https://doi.org/10.3389/ fpsyg.2019.00306
- Carmona-Halty, M., Villegas-Robertson, J. M., & Marín-Gutiérrez, M. (2019). El rol de las emociones positivas en el capital psicológico, engagement y desempeño académico: un estudio en el contexto escolar chileno. Cadernos EBAP, 44(10), 586-592. https://doi.org/0378-1844/14/07/468-08
- Cattani, B. C., Teixeira, M. A. P., & Ourique, L. R. (2016). Maturidade de carreira e nível socioeconômico em estudantes do ensino médio. Gerais: Revista Interinstitucional de Psicologia, 9(1), 67-77. http://pepsic.bvsalud. org/scielo.php?script=sci_arttext&pid=S1983-82202016000100006&lng=pt&tlng=
- Cericatto, C., Alves, C., & Patias, N. (2017). A Maturidade para a Escolha Profissional em Adolescentes do Ensino Médio. Revista de Psicologia da IMED, 9(1), 22-37. https://doi.org/10.18256/2175-5027.2017. v9i1.1487
- Chagas, M. K. S., Moreira Junior, D. B., Cunha, G. N., Caixeta, R. P., & Fonseca, E. F. (2016). Ocorrência da Síndrome de Burnout em acadêmicos de medicina de instituição de ensino no interior de Minas Gerais. Revista de Medicina e Saúde de Brasília, 5(2), 234-245. https://portalrevistas.ucb.br/index.php/ rmsbr/article/view/7241
- Ching, S.S.Y., Cheung, K., Hegney, D., & Rees, C.S. (2020). Stressors and coping of nursing students

- in clinical placement: A qualitative study contextualizing their resilience and burnout. Nurse Education in Practice, 42, 102690. https://doi.org/10.1016/j. nepr.2019.102690
- Daolio, C. C., & Neufeld, C. B. (2017).Intervenção para stress e ansiedade em prévestibulandos: estudo piloto. Revista Brasileira de Orientação Profissional, 18(2), 129-140. http://dx.doi. org/10.26707/1984-7270/2017v18n1p7
- Datu, J. A. D., King, R. B., & Valdez, J. P. M. (2016). Psychological capital bolsters motivation, engagement, and achievement: Cross-sectional and longitudinal studies. The Journal of Positive Psychology, 13(3). https://doi.org/10.1080/17439760.2016.12 57056
- Farina, E., Ornaghi, V., Pepe, A., Fiorilli, C., & Grazzani, I. (2020). High School Student Burnout: Is Empathy a Protective or Risk Factor? Frontiers in Psychology, 11. https://doi.org/10.3389/ fpsyg.2020.00897
- Fiorilli, C., De Stasio, S., Di Chiacchio, C., Pepe, A., & Salmela-Aro, K. (2017). School burnout, depressive symptoms and engagement: Their combined effect on student achievement. International Journal of Educational Research, 84, 1–12. https://doi. org/10.1016/j.ijer.2017.04.001
- García-Izquierdo, M., Ríos-Risquez, M. I., Carrillo-García, C., & Sabuco-Tebar, E. de los Á. (2017). The moderating role of resilience in the relationship between academic burnout and the perception of psychological health in nursing students. Educational Psychology, 1–12. https://doi.org/10.1080/01443 410.2017.1383073
- Güler, M. (2020). The Effect of Psychoeducation Program on Burnout Levels of University Students. OPUS Uluslararası Toplum Arastırmaları Dergisi, Eğitim ve Toplum Özel sayısı, 5524-5539. https://doi. org/10.26466/opus.813344
- Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2010). Multivariate Data Analysis - A global perspective. Pearson Prentice Hall.
- Hazan Liran, B., & Miller, P. (2017). The Role of Psychological Capital in Academic Adjustment Among University Students. Journal of Happi-20(1). https://doi.org/10.1007/ Studies, s10902-017-9933-3

- Heinen, I., Bullinger, M., & Kocalevent, R.-D. (2017). Perceived stress in first year medical students-associations with personal resources and emotional distress. BMC medical education, 17(1), 4. https:// doi.org/10.1186/s12909-016-0841-8
- Hennequin, E., Condomines, B., & Wielhorski, N. (2017). Career transition consultants' perceived roles. Career Development International, 22(6), 683-702. https://doi.org/10.1108/CDI-09-2016-0156
- Lee, M.Y., Lee, M.K., Lee, M.J., & Lee, S.M. (2020), Academic Burnout Profiles and Motivation Styles Among Korean High School Students. Japanese Psychological Research, 62, 184-195. https://doi. org/10.1111/jpr.12251
- Lima, L. G., & Nassif, V. M. J. (2017). Similitudes entre teoria social cognitiva, capital psicológico. Gestão e Planejamento, 18, 369-385. https://doi. org/10.21714/2178-8030gep.v18.4517
- Lin, S.H., & Huang, Y.C. (2014). Life stress and academic burnout. Active Learning in Higher Education, 15(1), 77-90. https://doi.org/10.1177/1469787413514651
- Luthans, F. (2002). The need for and meaning of positive organizational behavior. Journal of Organizational Behavior, 23(6), 695-706. https://doi. org/10.1002/job.165
- Luthans, F., Avolio, B. J., Avey, J. B., & Norman, S. M. (2007). Positive psychological capital: measurement and relationship with performance and satisfaction. Personnel Psychology, 60(3), 541-572. https:// doi.org/10.1111/j.1744-6570.2007.00083.x
- Martínez, I. M., Youssef-Morgan, C. M., Chambel, M. J., & Marques-Pinto, A. (2019a) Antecedents of academic performance of university students: academic engagement and psychological capital resources. Educational Psychology, 39(8), 1047-1067. https://doi.org/10.1080/01443410.2019.1623382
- Matos, F. R. (2020). Burnout e Capital Psicológico: Uma Perspectiva Teórico-metodológica sobre Transição de Carreira de Estudantes. [Tese de doutorado, Universidade Federal do Espírito Santol
- Merino-Tejedor, E., Hontangas, P. M., & Boada-Grau, J. (2016). Career adaptability and its relation to self-regulation, career construction, and academic engagement among Spanish university students. Journal of Vocational Behavior, 93, 92-102. https:// doi.org/10.1016/j.jvb.2016.01.005

- Nilforooshan, P., & Salimi, S. (2016). Career adaptability as a mediator between personality and career engagement. Journal of Vocational Behavior, 94, 1–10. https://doi.org/10.1016/j.jvb.2016.02.010
- Palos, R., Maricutoiu, L. P., & Costea, I. (2019). Relations between academic performance, student engagement and student burnout: A cross-lagged analysis of a two-wave study. Studies in Educational Evaluation, 60, 199–204. https://doi.org/10.1016/j. stueduc.2019.01.005
- Patias, N. D., Machado, W. L., Bandeira, D. R., & Dell'Aglio, D. D. (2016). Depression Anxiety and Stress Scale (DASS-21) - Short Form: Adaptação e Validação para Adolescentes Brasileiros. Psico-USF, 21(3), 459-469. https://doi. org/10.1590/1413-82712016210302
- Pletsch, C. S., & Zonatto, V. C. S. (2018). Evidence of the effects of psychological capital on the transfer of knowledge from accounting students to business organizations. Journal of Knowledge Management, 22(8), 1826-1843. https://doi.org/10.1108/ JKM-04-2018-0270
- Poots, A., & Cassidy, T. (2020). Academic expectation, self-compassion, psychological capital, social support and student wellbeing. International Journal of Educational Research, 99, 101506. https://doi. org/10.1016/j.ijer.2019.101506
- R Core Team. (2017). R: A Language and Environment for Statistical Computing. https://www.R-project.org/
- Ramirez-Arellano, A. (2019). Students learning pathways in higher blended education: An analysis of complex networks perspective. Computers & https://doi.org/10.1016/j. *103634*. compedu.2019.103634
- Reis, D., Xanthopoulou, D., & Tsaousis, I. (2015). Measuring job and academic burnout with the Oldenburg Burnout Inventory (OLBI): Factorial invariance across samples and countries. Burnout Research, 02(01), 8-18. https://doi.org/10.1016/j. burn.2014.11.001
- Romano, L., Tang, X., Hietajärvi, L., Salmela-Aro, K., & Fiorilli, C. (2020). Students' Trait Emotional Intelligence and Perceived Teacher Emotional Support in Preventing Burnout: The Moderating Role of Academic Anxiety. International Journal of Environmental Research and Public Health, 17(13), 4771. https://doi.org/10.3390/ijerph17134771

- Rizzatti, D. B., Sacramento, A. M., Valmorbida, V. S., Mayer, V. P., & Oliveira, M. Z. (2018). Transição de carreira em adultos brasileiros: um levantamento da literatura científica. Gerais: Revista Interinstitucional de Psicologia, 11(1), 153-173. http://pepsic.bvsalud.org/scielo.php?script=sci_ arttext&pid=S1983-82202018000100012&lng=pt &tlng=pt.
- Salami, A. A., Iyanda, R. A., & Suleiman, H. B. (2017). Academic Burnout and Classroom Assessment Environment: The Case of University's Accounting Students in Kwara State, Nigeria. Nitte Management Review, 11(1), 1-20. https://doi.org/10.18311/ nmr/2017/v11i1/20593
- Sangma, Z. M., Shantibala, K., Akoijam, B. S., Maisnam, A. B., Vizovonuo, V., & Vanlalduhsaki (2018). Perception of students on parental and teachers' pressure on their academic performance. Journal of Dental and Medical Sciences (IOSR-IDMS), 17(1), 68– 75. https://doi.org/10.9790/0853-1701016875.
- Savickas, M. L. (2013). Career Construction Theory and Practice. Em R. W. Lent & S. D. Brown (Eds.), Career Development and Counseling: Putting Theory and Research to Work (pp. 147-183). John Wiley & Sons.
- Savickas, M. L., Nota, L., Rossier, J., Dauwalder, J. P., Duarte, M. E., Guichard, J., ... Van Vianen, A. E. (2009). Life designing: A paradigm for career construction in the 21st century. Journal of Vocational Behavior, 75(3), 239-250. https://doi. org/10.1016/j.jvb.2009.04.004
- Schönhofen, F. L., Neiva-Silva, L., Almeida, R. B., Vieira, M. E. C. D., & Demenech, L. M. (2020). Transtorno de ansiedade generalizada entre estudantes de cursos de pré-vestibular. Jornal Brasileiro de Psiquiatria, 69(3), 179-186. https://doi. org/10.1590/0047-2085000000277
- Shadid, A., Shadid, A. M., Shadid, A., Almutairi, F. E., Almotairi, K. E., Aldarwish, T., Alzamil, O., Alkholaiwi, F., & Khan, S. U. (2020). Stress, Burnout, and Associated Risk Factors in Medical Students. Cureus, 12(1), e6633. https://doi.org/10.7759/ cureus.6633
- Soltani, Z., Sadegh mahboob, S., Ghsemi jobaneh, R., Yoosefi, N. (2016). Role of psychological capital in academic burnout of Students. Education Strategies in Medical Sciences, 9(2), 156-162. http://edcbmj.ir/ article-1-989-en.html

- Super, D. E., Savickas, M. L., & Super, C. M. (1996). The life-span, life-space approach to careers. Em D. Brown & L. Brooks (Orgs.), Career choice and development (pp. 121-178). Jossey-Bass.
- Sweet, J., & Swayze, S. (2020). Academic Psychological Capital: A Novel Approach to Freshmen Retention. Journal of College Student Retention: Research, Theory & Practice, 1-19. https://doi. org/10.1177/1521025120980372
- Uribe, M. A. T., M., & Illesca, M. P. (2017). Burnout en estudiantes de enfermería de una universidad privada. Investigación en Educación Médica, 6(24), 234-241. https://doi.org/10.1016/j.riem.2016.11.005
- Van der Horst, A. C., Klehe, U. C., & Van der Heijden, B. (2017). Adapting to a looming career transition: How age and core individual differences interact. Journal of Vocational Behavior, 99, 132-145. https:// doi.org/10.1016/j.jvb.2016.12.006
- Venkatesh, R., & Blaskovich, J. (2012). The mediating effect of psychological capital on the budget participation-job performance relationship. Journal of Management Accounting Research, 24(1), 159-175. https://doi.org/10.2308/jmar-50202
- Vizoso, C., Arias-Gundín, O., & Rodríguez, C. (2019). Exploring coping and optimism as predictors of academic burnout and performance among university students. Educational Psychology, 1–16. https:// doi.org/10.1080/01443410.2018.1545996

- Von Harscher, H., Desmarais, N., Dollinger, R., Grossman, S., & Aldana, S. (2018). The impact of empathy on burnout in medical students: new findings. Psychology, Health & Medicine, 23(3), 295-303. https://doi.org/10.1080/13548506.2017.137 4545
- You, J. (2016). The relationship among college student's psychological capital, learning empowerment, and engagement. Learning and Individual Diferences, 49, 17-24. https://doi.org/10.1016/j. lindif.2016.05.001
- Wilkins-Yel, K. G., Roach, C. M. L., Tracey, T. J. G., & Yel, N. (2018). The effects of career adaptability on intended academic persistence: The mediating role of academic satisfaction. Journal of Vocational Behavior, 108, 67-77. https://doi.org/10.1016/j. jvb.2018.06.006
- Zonatto, V. C. S., Zanotto, J. Z., Silva, P. R., Degenhart, L., & Marquezan, L. H. F. (2020). Influência Do Capital Psicológico Na Motivação Para Aprendizagem E Aquisição De Conhecimentos. Contabilidade Vista & Revista, 31(03). https://doi.org/10.22561/ cvr.v31i2.6116

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